

April 15, 2013

• Engineering

Remediation

• Consulting

Mr. Khai M. Dao USEPA Region 3 1650 Arch Street (LC30) Philadelphia, PA 19103-2029

Re: Notification of an Exceedance

Superior Tube Company, Collegeville, PA 19426

Dear Mr. Dao:

Pursuant to the Act 2 Cleanup Plan, as modified by the December 13, 2011 letter from Environmental Alliance, Inc. (Alliance) to the United States Environmental Protection Agency (USEPA), for the above referenced Site, Alliance, on behalf of Superior Tube Company, Inc. (STCI), is providing written notification that an exceedance of the Site-Specific Standard (SSS) for trichloroethylene (TCE) at a Point of Compliance (POC) monitoring well has occurred. The established SSS for TCE at the Site is 1,800 µg/L.

The Act 2 Cleanup Plan, as modified by the December 31, 2011 letter, provides that:

"Should a POC well indicate an exceedance of an SSS, STC will re-sample the well within two weeks of receipt of the analytical results from the original sampling event. If the results of the resampling event confirm the exceedance, PADEP and USEPA will be notified within 10 days."

The POC well 2M, sampled on March 12, 2013, reported a TCE concentration of 2,400 μ g/L. Analytical results from samples collected on March 29, 2013 during the re-sampling event indicated a TCE concentration of 1,500 μ g/L at 2M.

As you are aware, STCI is currently conducting post-remediation quarterly attainment monitoring at the Site. The South Recovery System (SRS) and North Recovery System (NRS) pumping wells used for groundwater remediation and containment were shutdown on or before February 6, 2013. The first quarterly monitoring and sampling event was conducted from March 11 through 13^{th} , 2013. The laboratory analytical results were received on or around March 25, 2013. The only POC well to report an exceedance of the TCE SSS was 2M. As such, a confirmatory sampling event was scheduled and completed on March 29, 2013. The results of the confirmatory sampling event were received on April 5, 2013 and indicated an analytical result of 1,500 μ g/L, below the SSS for TCE. The average concentration of TCE over the two sampling events is 1,950 μ g/L.

Please find attached a Site plan depicting TCE concentrations at the POC wells that were sampled in March. Additionally, a Table is provided summarizing recent groundwater analytical data for the POC wells. We will provide EPA and PADEP with a summary of all of the recent sampling data, along with concentration trends and any recommended course of action, within 30 days from the date of this notice.

If you have any questions regarding this submittal or require additional information, please contact me at (302) 234-4400.

Sincerely yours,

ENVIRONMENTAL ALLIANCE, INC.

Joseph Rossi Project Manager

c: Rich Staron, PADEP

Rick Warden, STC Ryan Preston, STCI

Brian Jacot, Greystone Consolidated Companies, Inc.

Attachments

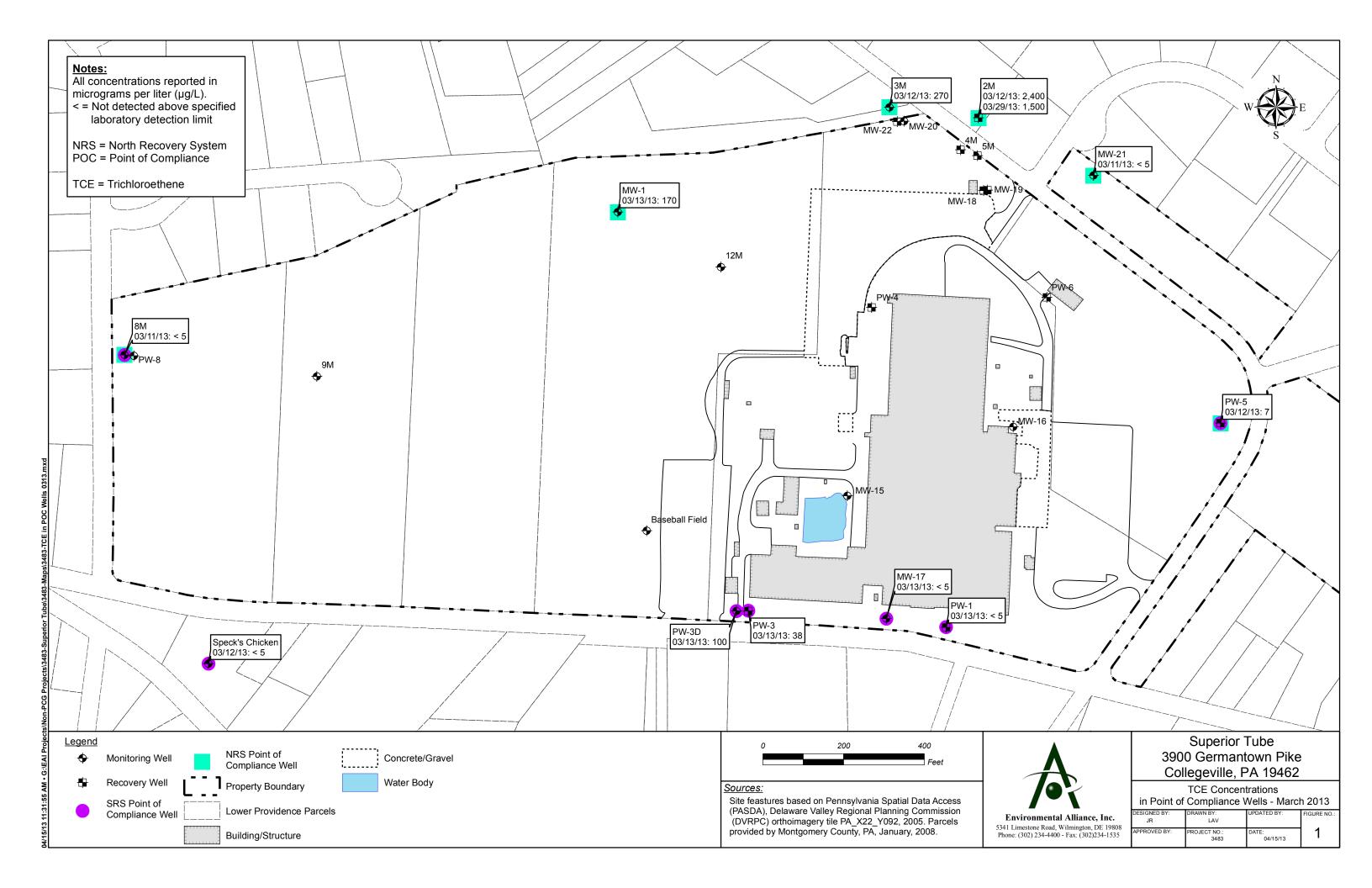


TABLE 1
GROUNDWATER ANALYTICAL DATA SUMMARY (2008-PRESENT)
POINT OF COMPLIANCE (POC) WELLS AND INTERIOR MONITORING WELLS
SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Depth to	Groundwater		Consti	tuents of Conce	rn (µg/L)	
Location ID	Sample Date	Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-1	RES		70	100	5	200	5
S	ite Specific Sta	ndards		9,300	7,300	3,500	388,000	1,800
MW-1	01/09/08	83.92	74.32	23	< 5	< 5	< 5	110
TOC = 158.24	11/11/08	85.67	72.57	23	< 5	< 5	< 5	120
	11/18/09	84.08	74.16	19	< 5	< 5	< 5	79
	11/17/10	82.60	75.64	26	< 5	< 5	< 5	87
	11/14/11	68.78	89.46	28	< 5	< 5	< 5	110
Dup	11/14/11	68.78	89.46	28	< 5	< 5	< 5	110
	12/26/11	80.81	77.43	27	< 5	< 5	< 5	65
	12/28/11	77.75	80.49	30	< 5	< 5	< 5	60
	12/30/11	72.64	85.60	41	< 5	< 5	< 5	280
	04/19/12	65.00	93.24	47	< 5	< 5	< 5	350
	04/27/12	62.67	95.57	26	< 5	< 5	< 5	140
	05/03/12	61.90	96.34	35	6.2	0.9	< 0.5	330
	05/09/12	58.75	99.49	26	< 5	< 5	< 5	160
	05/17/12			30	< 5	< 5	< 5	200
	05/24/12			57	< 5	< 5	< 5	590
	06/08/12	74.02	84.22	26	< 5	< 5	< 5	120
	11/28/12	69.51	88.73	18	< 5	< 5	< 5	82
	03/13/13	49.60	108.64	26	< 5	< 5	< 5	170
2M	01/08/08			< 5	< 5	< 5	< 5	200
TOC = 163.91	05/28/08			19	< 10	< 10	< 10	1,800
	11/12/08			< 5	< 5	5	< 5	180
	11/18/09			< 5	< 5	5	< 5	260
	11/19/10			< 5	< 5	5	< 5	250
	05/16/11			< 5	< 5	5	< 5	330
	09/08/11			7	< 5	< 5	< 5	860
	11/14/11	123.70	40.21	< 10	< 10	< 10	< 10	970
	12/26/11			7	< 5	< 5	< 5	310
	12/30/11	125.20	38.71	5	< 5	< 5	< 5	230
	04/19/12	196.80	-32.89	< 25	< 25	< 25	< 25	2,000
	04/27/12	196.80	-32.89	11	< 10	< 10	< 10	2,000
	05/02/12	196.80 **	-32.89	< 10	< 10	< 10	< 10	1,800



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POINT OF COMPLIANCE (POC) WELLS AND INTERIOR MONITORING WELLS
SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Depth to	Groundwater		Consti	tuents of Conce	rn (µg/L)	
Location ID	Sample Date	Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-l	RES		70	100	5	200	5
S	ite Specific Sta	ndards		9,300	7,300	3,500	388,000	1,800
2M	05/09/12	196.80 **	-32.89	< 25	< 25	< 25	< 25	2,100
cont'd	05/17/12			11	< 10	< 10	< 10	2,300
	05/24/12			10	< 5	< 5	< 5	1,200
	06/01/12			17	< 10	< 10	< 10	2,100
	06/29/12			< 5	< 5	< 5	< 5	250
	07/06/12			< 5	< 5	< 5	< 5	260
	10/11/12	181.50 **	-17.59					
	11/26/12	107.10	56.81	< 5	< 5	< 5	< 5	160
	03/12/13	59.00	104.91	8	< 5	< 5	< 5	2,400
	03/29/13			6	< 5	< 5	< 5	1,500
3M	01/08/08	43.21	124.76	< 5	< 5	< 5	< 5	630
TOC = 167.97	05/27/08	43.60	124.37	< 5	< 5	< 5	< 5	330
	11/11/08	45.51	122.46	< 5	< 5	< 5	< 5	290
	05/12/09	43.10	124.87	< 5	< 5	< 5	< 5	210
	11/16/09	43.62	124.35	< 5	< 5	< 5	< 5	290
	05/18/10	44.08	123.89	< 5	< 5	< 5	< 5	500
Dup	05/18/10			< 5	< 5	< 5	< 5	480
	11/17/10	43.91	124.06	< 5	< 5	< 5	< 5	380
	05/16/11	43.40	124.57	< 5	< 5	< 5	< 5	390
	09/08/11			< 5	< 5	< 5	< 5	420
	11/15/11	42.89	125.08	< 5	< 5	< 5	< 5	130
	12/26/11	43.92	124.05	< 5	< 5	< 5	< 5	360
	12/28/11	42.67	125.30	< 5	< 5	< 5	< 5	360
	12/30/11	42.56	125.41	< 5	< 5	< 5	< 5	300
	04/19/12	43.25	124.72	< 5	< 5	< 5	< 5	330
	04/27/12	42.35	125.62	< 5	< 5	< 5	< 5	170
	05/03/12	41.12	126.85	1.3	< 0.5	< 0.5	< 0.5	420
	05/09/12	41.60	126.37	< 5	< 5	< 5	< 5	470
	05/17/12			< 5	< 5	< 5	< 5	510
	05/24/12			< 5	< 5	< 5	< 5	570
	05/29/12	42.68	125.29	< 5	< 5	< 5	< 5	300
	06/08/12	43.10	124.87	< 5	< 5	< 5	< 5	170
	11/26/12	43.41	124.56	< 5	< 5	< 5	< 5	250
	03/12/13	35.70	132.27	< 5	< 5	< 5	< 5	270



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		Depth to	Groundwater		Consti	tuents of Conce	rn (μg/L)	
Location ID	Sample Date	Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-1	RES		70	100	5	200	5
	Site Specific Standards					3,500	388,000	1,800
4M	01/07/08	160.30	8.40	< 500	< 500	< 500	< 500	69,000
TOC = 168.70	05/28/08	156.11	12.59	< 500	< 500	< 500	< 500	62,000
	11/10/08			< 500	< 500	< 500	< 500	54,000
	05/12/09			< 500	< 500	< 500	< 500	57,000
	11/16/09	157.57	11.13	< 500	< 500	< 500	< 500	64,000
	05/17/10	160.00	8.70	300	< 250	< 250	< 250	88,000
	11/15/10	179.00	-10.30	< 50	< 50	< 50	< 50	16,000
	12/09/10			53	< 16	20	< 16	19,000
	01/11/11			58	< 50	< 50	< 50	14,000
	02/28/11			< 50	< 50	< 50	< 50	8,600
	03/15/11			< 50	< 50	< 50	< 50	7,500
	04/05/11			< 25	< 25	< 25	< 25	4,000
	05/04/11			< 100	< 100	< 100	< 100	11,000
	05/16/11	167.30	1.40	< 25	< 25	< 25	< 25	7,700
	06/09/11			< 250	< 250	< 250	< 250	25,000
	08/22/11	174.70	-6.00	10	< 5	6	< 5	880
	09/08/11			11	< 5	< 5	< 5	900
	10/19/11			< 25	< 25	< 25	< 25	3,300
	11/14/11	174.90	-6.20	7	< 5	< 5	< 5	510
	12/05/11			< 50	< 50	< 50	< 50	10,000
	12/26/11	169.10	-0.40	< 100	< 100	< 100	< 100	24,000
	12/30/11	86.90	81.80	< 50	< 50	< 50	< 50	15,000
	02/24/12			< 50	< 50	< 50	< 50	13,000
	03/06/12			< 50	< 50	< 50	< 50	8,600
	03/29/12			33	< 25	< 25	< 25	11,000
	04/19/12	120.80	47.90	< 50	< 50	< 50	< 50	4,200
	04/27/12	120.00	48.70	< 25	< 25	< 25	< 25	3,800
	05/02/12	76.72	91.98	< 50	< 50	< 50	< 50	15,000
	05/09/12	80.12	88.58	< 100	< 100	< 100	< 100	14,000
	05/17/12			< 100	< 100	< 100	< 100	17,000
	05/24/12			< 10	< 10	< 10	< 10	1,700



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		Depth to	Groundwater		Constit	tuents of Conce	rn (μg/L)	
Location ID	Sample Date	Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-	RES		70	100	5	200	5
5	Site Specific Standards					3,500	388,000	1,800
4M	05/29/12			13	< 5	8	< 5	4,100
cont'd	06/08/12			< 25	< 25	< 25	< 25	4,900
	07/25/12			< 100	< 100	< 100	< 100	20,000
	08/21/12			< 100	< 100	< 100	< 100	15,000
	09/10/12			57	< 25	26	< 25	18,000
	10/11/12	138.5 **		< 50	< 50	< 50	< 50	14,000
	11/26/12	159.60	9.10	< 25	< 25	< 25	< 25	2,100
	02/06/13	174.30	-5.60	< 25	< 25	< 25	< 25	3,400
	02/28/13	59.35	109.35	< 50	< 50	< 50	< 50	7,600
	03/11/13	59.04	109.66	32	< 5	12	5	6,800
8M	01/07/08	20.71	105.05	< 5	< 5	< 5	< 5	< 5
TOC = 125.76	05/28/08	20.25	105.51	< 5	< 5	< 5	< 5	< 5
	11/10/08	21.95	103.81	< 5	< 5	< 5	< 5	< 5
	05/11/09	19.31	106.45	< 5	< 5	< 5	< 5	< 5
	11/18/09	22.37	103.39	< 5	< 5	< 5	< 5	< 5
	05/19/10	20.61	105.15	< 5	< 5	< 5	< 5	< 5
	11/17/10	19.78	105.98	< 5	< 5	< 5	< 5	< 5
	05/17/11	20.59	105.17	< 5	< 5	< 5	< 5	< 5
	11/14/11	20.31	105.45	< 5	< 5	< 5	< 5	< 5
	05/03/12	19.95	105.81	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	05/09/12	19.55	106.21	< 5	< 5	< 5	< 5	< 5
	05/17/12			< 5	< 5	< 5	< 5	< 5
	05/24/12			< 5	< 5	< 5	< 5	< 5
	05/29/12	20.39	105.37	< 5	< 5	< 5	< 5	< 5
	06/08/12	23.11	102.65	< 5	< 5	< 5	< 5	< 5
	11/28/12	20.54	105.22	< 5	< 5	8	< 5	46
	03/11/13	18.89	106.87	< 5	< 5	< 5	< 5	< 5



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SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Depth to	Groundwater		Constit	tuents of Conce	rn (μg/L)	
Location ID	Sample Date	Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-l	RES		70	100	5	200	5
	Site Specific Star	ndards		9,300	7,300	3,500	388,000	1,800
MW-15	01/09/08	60.04	130.81	< 10	< 10	73	< 10	1300
TOC = 190.85	05/27/08	63.46	127.39	< 10	< 10	47	< 10	2,300
	11/10/08	70.70	120.15	< 5	< 5	97	< 5	640
	05/11/09	64.25	126.60	< 10	< 10	80	< 10	1,200
	11/17/09	64.40	126.45	7	< 5	77	< 5	1,300
	05/18/10	65.47	125.38	< 10	< 10	55	< 10	2,600
	11/16/10	66.56	124.29	< 5	< 5	87	< 5	660
	05/17/11	62.06	128.79	< 10	< 10	73	< 10	1,900
	11/17/11	57.09	133.76	< 5	< 5	73	< 5	650
	05/30/12	63.39	127.46	< 10	< 10	50	< 10	980
	11/28/12	60.05	130.80	< 5	< 5	77	< 5	1,500
	02/28/13	49.41	141.44	< 5	< 5	57	< 5	720
	03/13/13	50.45	140.40	< 5	< 5	44	< 5	750
MW-17	01/09/08	94.37	105.90	< 5	< 5	8	< 5	29
TOC = 200.27	05/27/08	102.10	98.17					
	11/12/08	97.23	103.04	< 5	< 5	24	< 5	< 5
	05/12/09	107.08	93.19					
	11/17/09	112.61	87.66	< 5	< 5	9	< 5	< 5
	05/17/10	112.22	88.05					
	11/17/10	115.60	84.67	< 5	< 5	12	< 5	6
	05/16/11	103.41	96.86					
	11/17/11	89.90	110.37	< 5	< 5	9	< 5	5
	05/03/12	32.82	167.45					
	11/27/12	96.60	103.67	< 5	< 5	< 5	< 5	< 5
	03/13/13	72.55	127.72	< 5	< 5	< 5	< 5	< 5



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SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Depth to	Groundwater		Consti	tuents of Conce	rn (μg/L)	
Location ID	Sample Date	Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-l	RES		70	100	5	200	5
S	Site Specific Standards					3,500	388,000	1,800
MW-21	01/09/08	121.36	56.75	< 5	< 5	11	< 5	11
TOC = 178.11	05/27/08	123.98	54.13	< 5	< 5	< 5	< 5	< 5
	11/12/08	124.04	54.07	< 5	< 5	< 5	< 5	< 5
	05/12/09	123.50	54.61	< 5	< 5	16	< 5	37
	11/18/09	122.57	55.54	< 5	< 5	< 5	< 5	< 5
Dup	11/18/09			< 5	< 5	< 5	< 5	< 5
	05/17/10	129.63	48.48	< 5	< 5	< 5	< 5	< 5
	11/17/10	122.50	55.61	< 5	< 5	< 5	< 5	< 5
	05/16/11	117.33	60.78	< 5	< 5	< 5	< 5	< 5
Dup	05/16/11			< 5	< 5	< 5	< 5	< 5
	11/15/11	98.86	79.25	< 5	< 5	< 5	< 5	< 5
	12/26/11	121.55	56.56	< 5	< 5	< 5	< 5	< 5
	12/28/11	108.41	69.70	< 5	< 5	< 5	< 5	< 5
	12/30/11	96.09	82.02	< 5	< 5	< 5	< 5	< 5
	05/03/12	87.18	90.93	< 0.5	< 0.5	< 0.5	< 0.5	1
	05/09/12	81.80	96.31	< 5	< 5	< 5	< 5	< 5
	05/17/12			< 5	< 5	< 5	< 5	< 5
	05/24/12			< 5	< 5	< 5	< 5	< 5
	05/29/12	94.97	83.14	< 5	< 5	< 5	< 5	< 5
	06/08/12	100.51	77.60	< 5	< 5	< 5	< 5	< 5
	11/26/12	93.89	84.22	< 5	< 5	< 5	< 5	< 5
	03/11/13	68.67	109.44	< 5	< 5	< 5	< 5	< 5
MW-22	01/08/08	179.90	-18.35	< 5	< 5	10	< 5	640
TOC = 161.55	05/28/08	180.02	-18.47	< 5	< 5	10	< 5	560
	11/10/08	180.20	-18.65	< 5	< 5	10	< 5	530
	05/12/09	180.10	-18.55	5	< 5	9	< 5	580
	11/16/09	> 200		5	< 5	9	< 5	700
	05/17/10	214.00	-52.45	7	< 5	9	< 5	1,000
	11/15/10	98.35	63.20	8	< 5	9	< 5	800
	05/16/11	> 200		9	< 5	9	< 5	840



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SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Donalis da	C	Constituents of Concern (µg/L)				
Location ID	Sample Date	Depth to Water (ft)	Groundwater Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-l	RES		70	100	5	200	5
	Site Specific Sta	ndards		9,300	7,300	3,500	388,000	1,800
MW-22	09/08/11			26	< 10	< 10	< 10	2,500
cont'd	10/19/11			< 5	8	8	< 5	500
	11/15/11	168.10	-6.55	6	< 5	7	< 5	440
	12/05/11			10	< 5	6	< 5	970
	12/26/11	77.75	83.80	9	< 5	8	< 5	790
	12/30/11	79.10	82.45	26	< 25	< 25	< 25	1,800
	03/06/12			8	< 5	8	< 5	780
	04/19/12	167.60	-6.05	79	< 50	< 50	< 50	6,400
	04/27/12	167.20	-5.65	77	< 25	< 25	< 25	5,700
	05/02/12	70.10	91.45	75	< 50	< 50	< 50	6,600
	05/09/12	64.95	96.60	97	< 25	< 25	< 25	7,500
	05/17/12			92	< 25	< 25	< 25	7,500
	05/24/12			< 10	< 10	< 10	< 10	1,200
	05/29/12			9	< 5	7	< 5	1,200
	06/08/12	151.36	10.19	9	< 5	8	< 5	890
	07/25/12			7	< 5	10	< 5	760
	08/21/12			7	< 5	9	< 5	660
	11/26/12	137.60	23.95	13	< 5	9	< 5	1,300
	02/28/13	53.42	108.13	87	< 50	< 50	< 50	7,600
	03/11/13	53.07	108.48	58	< 5	9	< 5	5,300
PW-1	01/09/08			< 5	< 5	< 5	< 5	5
TOC = 200.40	05/28/08	118.00	82.40	< 5	< 5	< 5	< 5	5
	11/10/08	NM	NM	< 5	< 5	< 5	< 5	< 5
	05/11/09	125.00	75.40	< 5	< 5	< 5	< 5	< 5
	11/16/09	132.37	68.03	< 5	< 5	< 5	< 5	< 5
	05/18/10	137.20	63.20	< 5	< 5	< 5	< 5	12
	11/17/10	140.85	59.55	< 5	< 5	< 5	< 5	24
	05/16/11	124.00	76.40	< 5	< 5	< 5	< 5	< 5
	11/15/11	107.90	92.50	< 5	< 5	< 5	< 5	< 5
	05/29/12	124.40	76.00	< 5	< 5	< 5	< 5	< 5
	11/27/12	118.30	82.10	< 5	< 5	< 5	< 5	< 5
	03/13/13	68.70	131.70	< 5	< 5	6	< 5	< 5



TABLE 1
GROUNDWATER ANALYTICAL DATA SUMMARY (2008-PRESENT)
POINT OF COMPLIANCE (POC) WELLS AND INTERIOR MONITORING WELLS
SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Donalis da	Groundwater		Consti	tuents of Conce	ern (µg/L)	
Location ID	Sample Date	Depth to Water (ft)	Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-l	RES		70	100	5	200	5
	Site Specific Star	ndards		9,300	7,300	3,500	388,000	1,800
PW-3	01/09/08	72.50	114.42	< 5	< 5	17	< 5	320
TOC = 186.92	05/28/08	80.00	106.92	< 5	< 5	14	< 5	290
	11/10/08	84.60	102.32	< 5	< 5	24	< 5	1,300
	05/11/09	83.70	103.22	< 5	< 5	9	< 5	290
	11/16/09	87.80	99.12	< 5	< 5	10	< 5	410
	05/17/10	88.70	98.22	< 5	< 5	10	< 5	570
	11/15/10	96.30	90.62	< 5	< 5	10	< 5	430
	05/17/11	83.02	103.90	< 5	< 5	10	< 5	290
	11/16/11	70.00	116.92	< 5	< 5	18	< 5	470
	05/30/12	81.00	105.92	< 5	< 5	13	< 5	310
	11/27/12	74.60	112.32	< 5	< 5	20	< 5	760
	03/13/13	50.12	136.80	< 5	< 5	24	< 5	38
PW-3D	01/09/08	87.87	99.37	< 5	< 5	< 5	< 5	6
TOC = 187.24	05/27/08	92.18	95.06					
	11/10/08	81.61	105.63	< 5	< 5	< 5	< 5	< 5
	05/12/09	96.66	90.58					
	11/17/09	102.77	84.47	< 5	< 5	< 5	< 5	69
	05/17/10	105.76	81.48					
	11/15/10	100.91	86.33	< 5	< 5	< 5	< 5	< 5
	05/16/11	90.17	97.07					
	11/16/11	79.82	107.42	< 5	< 5	< 5	< 5	< 5
	05/31/12	88.75	98.49					
	11/28/12	82.16	105.08	< 5	< 5	< 5	< 5	< 5
	03/13/13	65.51	121.73	< 5	< 5	< 5	< 5	100

TABLE 1
GROUNDWATER ANALYTICAL DATA SUMMARY (2008-PRESENT)
POINT OF COMPLIANCE (POC) WELLS AND INTERIOR MONITORING WELLS
SUPERIOR TUBE COMPANY, INC.,
COLLEGEVILLE, PA

		Donallo do	C		Consti	tuents of Conce	rn (µg/L)	
Location ID	Sample Date	Depth to Water (ft)	Groundwater Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE
	PA-US-2500-I	RES		70	100	5	200	5
\$	Site Specific Star	ndards		9,300	7,300	3,500	388,000	1,800
PW-5	01/10/08	98.50	107.08					
TOC = 205.58	05/28/08	NM	NM	< 5	< 5	7	< 5	< 5
	11/12/08	97.45	108.13					
	05/12/09	98.26	107.32	< 5	< 5	10	< 5	< 5
	11/16/09	127.20	78.38	< 5	< 5	7	< 5	< 5
	05/19/10	132.00	73.58	< 5	< 5	7	< 5	< 5
	11/15/10	119.90	85.68	< 5	< 5	< 5	< 5	< 5
	05/16/11	105.80	99.78	< 5	< 5	8	< 5	15
	11/15/11	97.95	107.63	< 5	< 5	< 5	< 5	< 5
	05/31/12	104.51	101.07	< 5	< 5	9	< 5	< 5
	03/12/13	86.20	119.38	< 5	< 5	5	< 5	7
	03/29/13			< 5	< 5	7	< 5	9
Speck's Chicken Well	01/09/08	75.94	95.98	6	< 5	< 5	< 5	< 5
TOC = 171.92	05/27/08	74.21	97.71	7	< 5	< 5	< 5	5
	11/12/08	NM	NM	5	< 5	< 5	< 5	< 5
	05/13/09	75.72	96.20	< 5	< 5	< 5	< 5	< 5
	11/19/09	76.05	95.87	5	< 5	< 5	< 5	< 5
	05/19/10	73.91	98.01	5	< 5	< 5	< 5	< 5
	11/19/10	76.46	95.46	6	< 5	< 5	< 5	33
	05/18/11	74.49	97.43	6	< 5	< 5	< 5	< 5
	11/18/11	72.36	99.56	6	< 5	< 5	< 5	< 5
	05/30/12	70.85	101.07	7	< 5	< 5	< 5	< 5
	11/29/12	61.70	110.22	7	< 5	< 5	< 5	< 5
	03/12/13	66.00	105.92	5	< 5	< 5	< 5	< 5

TABLE 1 GROUNDWATER ANALYTICAL DATA SUMMARY (2008-PRESENT) POINT OF COMPLIANCE (POC) WELLS AND INTERIOR MONITORING WELLS SUPERIOR TUBE COMPANY, INC., COLLEGEVILLE, PA

		Depth to	Cuana danatan	Constituents of Concern (µg/L)					
Location ID	Sample Date	Water (ft)	Groundwater Elevation (ft)	cis-1,2-DCE	trans-1,2- DCE	PCE	1,1,1-TCA	TCE	
	PA-US-2500-	RES		70	100	5	200	5	
\$	Site Specific Sta	ndards		9,300	7,300	3,500	388,000	1,800	
BBFIELD	01/07/08	86.62		< 5	< 5	< 5	< 5	< 5	
	05/28/08	87.35		< 5	< 5	< 5	< 5	12	
	11/11/08	88.35		< 5	< 5	< 5	< 5	7	
	05/11/09	86.40		8	< 5	< 5	< 5	75	
	11/17/09	86.91		< 5	< 5	< 5	< 5	6	
	05/17/10	86.40		< 5	< 5	< 5	< 5	< 5	
	11/17/10	86.65		< 5	< 5	< 5	< 5	15	
	05/17/11	84.35		< 5	< 5	< 5	< 5	11	
	11/15/11	84.32		< 5	< 5	< 5	< 5	35	
	05/30/12	83.40		< 5	< 5	< 5	< 5	< 5	
Dup	05/30/12			< 5	< 5	< 5	< 5	< 5	
	11/27/12	80.74		< 5	< 5	< 5	< 5	9	
Dup	11/27/12			< 5	< 5	< 5	< 5	9	
	02/28/13	78.25		5	< 5	8	< 5	94	
	03/12/13	74.49		< 5	< 5	< 5	< 5	27	
Dup	03/12/13			< 5	< 5	< 5	< 5	26	

μg/l = micrograms per liter

ft = feet

< = analyte not detected at or above the specified laboratory detection limit

 $TOC = Top \ of \ Casing. \ The units are feet above mean sea level (ft msl).$ $J = estimated \ value; \ added \ during \ data \ validation \ review \ process$

Wells highlighted in blue are Point of Compliance (POC) wells.

Bolded values indicate results are in exceedence of site specific standards.

 $Dup = Duplicate \ sample$

-- = Not Analyzed/ Not Applicable cis-1,2-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE = trans-1,2-Dichloroethene

* = Samples analyzed using EPA Method 524.2

PCE = Tetrachloroethene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

** = Digital liquid level reading

PA-UA-2500-RES = PADEP SHS Medium-Specific Concentrations in Groundwater, Residential Used Aquifer, TDS ≤ 2,500, Residential, Jan. 2011





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ANALYTICAL RESULTS

Prepared by:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Environmental Alliance, Inc. 5341 Limestone Rd Wilmington DE 19808

March 24, 2013

Project: 3483 / Superior Tube, PA

Submittal Date: 03/14/2013 Group Number: 1375604 PO Number: 3483 State of Sample Origin: PA

Client Sample Description	Lancaster Labs (LLI) #
8M0311131116 Grab Groundwater	6983860
MW210311131436 Grab Groundwater	6983861
MW220311131500 Grab Groundwater	6983862
4M0311131540 Grab Groundwater	6983863
FB0311131550 Grab Water	6983864
Trip031113 Water	6983865
SpecksChicken0312131045 Grab Groundwater	6983866
2M0312131030 Grab Groundwater	6983867
PW50312131045 Grab Groundwater	6983868
3M0312131400 Grab Groundwater	6983869
BaseballField0312131222 Grab Groundwater	6983870
BBFFD0312131223 Grab Groundwater	6983871
FB0312131410 Grab Water	6983872
TripBlank031213 Water	6983873
MW-10313131030 Grab Groundwater	6983874
MW-1MS0313131031 Grab Groundwater	6983875
MW-1MSD0313131032 Grab Groundwater	6983876
PW3D0313131145 Grab Groundwater	6983877
PW30313131300 Grab Groundwater	6983878
PW-10313131312 Grab Groundwater	6983879
MW150313131500 Grab Groundwater	6983880
MW170313131530 Grab Groundwater	6983881
FB0313131545 Grab Water	6983882
Trip031313 Water	6983883

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Environmental Alliance, Inc. Attn: Myrna Klair



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COPY TO

Respectfully Submitted,

Megan A. Moeller Senior Specialist

(717) 556-7261



Account

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Sample Description: 8M0311131116 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983860 LLI Group # 1375604

07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/11/2013 11:16 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

8M483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ne	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	е	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130771AA	03/18/2013 19:23	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130771AA	03/18/2013 19:23	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW210311131436 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983861 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/11/2013 14:36 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

21483

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-84	6 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	< 5	5	1
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130771AA	03/18/2013 19:47	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130771AA	03/18/2013 19:47	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW220311131500 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983862

LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/11/2013 15:00 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

22483

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-8	46 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	58	5	1
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	9	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	5,300	100	20
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130771AA	03/18/2013 20:12	Linda C Pape	1
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 17:11	Linda C Pape	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130771AA	03/18/2013 20:12	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	T130791AA	03/20/2013 17:11	Linda C Pape	20



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Sample Description: 4M0311131540 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983863 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/11/2013 15:40 by KR

Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

4M483

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-	846 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	32	5	1
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	12	5	1
10335	1,1,1-Trichloroethane	71-55-6	5	5	1
10335	Trichloroethene	79-01-6	6,800	250	50
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130771AA	03/18/2013 20:37	Linda C Pape	1
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130801AA	03/22/2013 04:39	Sarah A Guill	50
01163 01163	· .	SW-846 5030B SW-846 5030B	1 2	T130771AA T130801AA	03/18/2013 20:37 03/22/2013 04:39	Linda C Pape Sarah A Guill	1 50



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Sample Description: FB0311131550 Grab Water

2604 / Superior Tube, PA

LLI Sample # WW 6983864 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/11/2013 15:50 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

F1183

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-	-846 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroethen	e 156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	< 5	5	1
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130771AA	03/18/2013 15:42	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130771AA	03/18/2013 15:42	Linda C Pape	1



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Sample Description: Trip031113 Water

2604 / Superior Tube, PA

LLI Sample # WW 6983865 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/11/2013 Environmental Alliance, Inc.

> 5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

TA483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	nene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroe	ethene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroetha	ane	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 09:31	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 09:31	Linda C Pape	1



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Sample Description: SpecksChicken0312131045 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983866

LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 10:45 by KR E

Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

SC483

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-	846 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	5	5	1
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	< 5	5	1
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 12:46	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 12:46	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: 2M0312131030 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983867 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 10:30 by KR Environme

Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

2M483

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW	-846 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	8	5	1
10335	trans-1,2-Dichloroethen	e 156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	2,400	100	20
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 13:10	Linda C Pape	1
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 17:58	Linda C Pape	20
01163 01163		SW-846 5030B SW-846 5030B	1 2	T130791AA T130791AA	03/20/2013 13:10 03/20/2013 17:58	Linda C Pape Linda C Pape	1 20



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: PW50312131045 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983868 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 10:45 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

P5483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles ST	7-846 826	50B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene		156-59-2	< 5	5	1
10335	trans-1,2-Dichloroethe	ne	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	5	5	1
10335	1,1,1-Trichloroethane		71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	7	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 13:34	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 13:34	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: 3M0312131400 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983869 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 14:00 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10 Wilmin

Reported: 03/24/2013 18:59

3M483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	hene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroe	ethene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroetha	ane	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	270	50	10
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 13:58	Linda C Pape	1
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 18:22	Linda C Pape	10
01163 01163		SW-846 5030B SW-846 5030B	1 2	T130791AA T130791AA	03/20/2013 13:58 03/20/2013 18:22	Linda C Pape Linda C Pape	1 10



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: BaseballField0312131222 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983870

LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 12:22 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

BF483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	nene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroe	ethene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroetha	ane	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	27	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 14:22	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 14:22	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: BBFFD0312131223 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983871 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 12:23 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

BBF83

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles S	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroether	ie	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroeth	iene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	:	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	26	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 14:46	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 14:46	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: FB0312131410 Grab Water

2604 / Superior Tube, PA

LLI Sample # WW 6983872 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013 14:10 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

F1283

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ne	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	е	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 09:55	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 09:55	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: TripBlank031213 Water

2604 / Superior Tube, PA

LLI Sample # WW 6983873 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/12/2013

Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

TB483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ne	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	е	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 10:19	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 10:19	Linda C Pape	1



Account

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW-10313131030 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983874 LLI Group # 1375604

07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 10:30 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Submitted: 03/14/2013 18:10 Wilmington DE 19808

Reported: 03/24/2013 18:59

M1483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ene	156-59-2	26	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	ne	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	170	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 11:33	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 11:33	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW-1MS0313131031 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983875

LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 10:31 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

M1483

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-	846 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	46	5	1
10335	trans-1,2-Dichloroethene	156-60-5	22	5	1
10335	Tetrachloroethene	127-18-4	23	5	1
10335	1,1,1-Trichloroethane	71-55-6	25	5	1
10335	Trichloroethene	79-01-6	190	5	1
10335	Vinyl Chloride	75-01-4	21	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 11:57	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 11:57	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW-1MSD0313131032 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983876 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 10:32 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Submitted: 03/14/2013 18:10 Wilmington DE 19808

Reported: 03/24/2013 18:59

M1483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	ene	156-59-2	46	5	1
10335	trans-1,2-Dichloroe	thene	156-60-5	22	5	1
10335	Tetrachloroethene		127-18-4	23	5	1
10335	1,1,1-Trichloroetha	ne	71-55-6	24	5	1
10335	Trichloroethene		79-01-6	190	5	1
10335	Vinyl Chloride		75-01-4	21	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 12:21	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 12:21	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: PW3D0313131145 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983877 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 11:45 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

3D483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles S	W-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroether	e	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroeth	ene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	!	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	100	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 15:10	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 15:10	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: PW30313131300 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983878 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 13:00 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

P3483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	ene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroe	thene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	24	5	1
10335	1,1,1-Trichloroetha	ne	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	38	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 15:35	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 15:35	Linda C Pape	1



Account

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: PW-10313131312 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983879 LLI Group # 1375604

07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 13:12 by KR Environmental Alliance, Inc.

5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10

Reported: 03/24/2013 18:59

PW183

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	nene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroe	ethene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	6	5	1
10335	1,1,1-Trichloroetha	ane	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 15:59	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 15:59	Linda C Pape	1



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW150313131500 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983880 LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 15:00 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

15483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	44	5	1
10335	1,1,1-Trichloroethar	ne	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	750	50	10
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 16:23	Linda C Pape	1
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 18:47	Linda C Pape	10
		SW-846 5030B SW-846 5030B	1 2	T130791AA T130791AA	03/20/2013 16:23 03/20/2013 18:47	Linda C Pape Linda C Pape	1 10



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: MW170313131530 Grab Groundwater

2604 / Superior Tube, PA

LLI Sample # WW 6983881

LLI Group # 1375604

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 15:30 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

17483

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ne	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	е	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 16:47	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 16:47	Linda C Pape	1



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Sample Description: FB0313131545 Grab Water

2604 / Superior Tube, PA

LLI Sample # WW 6983882 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 15:45 by KR

Environmental Alliance, Inc.

5341 Limestone Rd

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

Wilmington DE 19808

F1383

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	< 5	5	1
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 10:43	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 10:43	Linda C Pape	1



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Sample Description: Trip031313 Water

2604 / Superior Tube, PA

LLI Sample # WW 6983883 LLI Group # 1375604 Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/13/2013 Environmental Alliance, Inc.

> 5341 Limestone Rd Wilmington DE 19808

Submitted: 03/14/2013 18:10 Reported: 03/24/2013 18:59

TC483			

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	< 5	5	1
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130791AA	03/20/2013 11:07	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130791AA	03/20/2013 11:07	Linda C Pape	1



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Page 1 of 2

Quality Control Summary

Client Name: Environmental Alliance, Inc. Group Number: 1375604

Reported: 03/24/13 at 06:59 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>LOO</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: T130771AA	Sample numbe	er(s): 698	3860-6983	864				
cis-1,2-Dichloroethene	< 5	5.	uq/l	101	100	80-120	2	30
trans-1,2-Dichloroethene	< 5	5.	ug/l	100	99	80-120	1	30
Tetrachloroethene	< 5	5.	ug/l	102	99	79-120	3	30
1,1,1-Trichloroethane	< 5	5.	ug/l	114	111	66-126	3	30
Trichloroethene	< 5	5.	ug/l	104	101	80-120	3	30
Vinyl Chloride	< 5	5.	ug/l	91	87	63-120	5	30
Batch number: T130791AA	Sample numbe	er(s): 698	3862,6983	865-698388	33			
cis-1,2-Dichloroethene	< 5	5.	ug/l	97		80-120		
trans-1,2-Dichloroethene	< 5	5.	ug/l	96		80-120		
Tetrachloroethene	< 5	5.	ug/l	99		79-120		
1,1,1-Trichloroethane	< 5	5.	ug/l	107		66-126		
Trichloroethene	< 5	5.	ug/l	100		80-120		
Vinyl Chloride	< 5	5.	ug/l	94		63-120		
Batch number: T130801AA	Sample numbe	er(s): 698	3863					
Trichloroethene	< 5	5.	ug/l	104	98	80-120	6	30

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS <u>%REC</u>	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: T130791AA	Sample	number(s)	: 6983862	,69838	65-6983	883 UNSPK	: 6983874		
cis-1,2-Dichloroethene	104	103	80-141	0	30				
trans-1,2-Dichloroethene	108	110	81-142	1	30				
Tetrachloroethene	108	107	80-128	0	30				
1,1,1-Trichloroethane	123	122	69-140	1	30				
Trichloroethene	113 (2)	104 (2)	88-133	1	30				
Vinyl Chloride	105	105	66-133	0	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



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Page 2 of 2

Quality Control Summary

Client Name: Environmental Alliance, Inc. Group Number: 1375604

Reported: 03/24/13 at 06:59 PM

Surrogate Quality Control

Analys	sis	Name	:	82	60	VOC	s
Batch	nun	mber:	Т	13	07	71AA	
		D.11		rı			

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6983860	110	95	94	102
6983861	110	99	94	102
6983862	110	98	93	100
6983863	111	96	91	102
6983864	109	93	96	102
Blank	106	95	99	105
LCS	103	96	101	110
LCSD	101	94	99	107
Limits:	80-116	77-113	80-113	78-113

	Analysis Name: 8260 VOCs Batch number: T130791AA							
Batch nu	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene				
6983865	104	95	96	106				
6983866	101	90	98	105				
6983867	106	94	97	108				
6983868	104	92	97	104				
6983869	106	94	96	104				
6983870	108	95	94	104				
6983871	110	95	93	105				
6983872	106	95	98	107				
6983873	105	96	97	109				
6983874	107	96	96	106				
6983875	106	96	98	109				
6983876	103	94	99	110				
6983877	108	96	97	105				
6983878	108	97	95	105				
6983879	108	96	94	102				
6983880	111	97	93	103				
6983881	108	95	93	103				
6983882	106	95	97	107				
6983883	104	92	97	107				
Blank	106	96	95	107				
LCS	103	96	99	110				
MS	106	96	98	109				
MSD	103	94	99	110				
Limits:	80-116	77-113	80-113	78-113				

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

🗱 eurofins		eu	ro	fi	n	S
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Lancaster

Acct.# 7039

COC # 328801

1) Client Informatio	n	(4)	Matr	ix	T	(5)		nalvsis	Requeste	ed	For Lab Use	Only	
Client:	Acct. #:	\vdash	T		1				ion Code		FSC:		
Environmental Alliance				_							SCR#:/	3605	<u>/</u>
Project Name/#:	PWSID #:		밀	Surface		70					Preser	vation Cod	des
Superior Whe			Ground	ırfa	ŀ	1,00					H=HCI	T=Thios	
Project Manager:	^{₽.o.} ** 34 ₹ 3	<u><u>a</u></u>	👨	ช	ဖွ	3 %					N=HNO ₃	B=NaOl	
Joe Rossi	Quote #:	Sediment			ē	EJ			1		$S=H_2SO_4$ (6) Rema	O=Othe	ir .
Sampler:	Caole #.	၂ တ		ώ	Total # of Containers	27					6) Reilla	185	
Name of state where samples were collected:	(3)	_	Potable	NPDES	Įį	1.4			1				
name of state where samples were collected.	\mathbf{r}	Composite Soil	<u>S</u>	물	=	24							
2)	Collected] _	_ <u> </u>	#	125							
Sample Identification	Date Time Ø	Com Soil	Water	Other:) tal	22							
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<u>8m</u>	13-11-13 1116		1		3	14							
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MW22	3-11-13 1500		45	<u> </u>	13	1							
4m	3-11-13 1540	•			3	V							
FB	3-11-13 1550	-	1		13	V							
Trip	~ ~ ~		ーレ		$\prod T$	U							1
SPECKS Chilten	3-12-13 1045		1/		2								
am	3-12-13 1030		1/		13								
PW5	3-12-13 1045	7	1 2	7	13	1/							
3M	3-12-13 1400		1.	7	13								
7) Turnaround Time (TAT) Requested (place)	ease circle) Relinqu	shed by	<u> </u>				ite	Time	Received by				ime (9)
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Date results are needed:		ned by	~\\\	Λ		Da	19/1/1/1	0905	Received by	maj			ime
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Type III (Reduced non-CLP) TX TRRI	P-13		EDD	Require	d?	Yes N	lo		Relinquis	hed by Cor	nmercial Carrier:		
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Type IV (CLP SOW) MA MCF	CT RCP		pecific C					No	Te	emperature	upon receipt	Am "	С
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eurofins Lancaster	Acct. # 70. 7039 Forour T3/14/13 6	For Eurof	fins Lancaster Lab	oratori	ies use only	28860	r_8 7	COC #	20000	
Laboratories	13/14/13 6 In	structions o	on reverse side correspo	and with c	circled numbers.	_ 	72-0	COC#	32880	12
1) Client Informa	ation	(4)		T	(5)		s Requested	For Lab Use	o Only	
Client:	Acct. #:		T	Ц ,			vation Codes	FSC:	3 Olliy	
ENVIRONMENTA / alliance								SCR#:		_
Client: EWI ron Menta Alliance Project Name/#: Sufferior Tube Project Manager: Joe Ross, Sampler:	PWSID#:	<u>_</u>	Ground		Cari			Prese	rvation Codes T=Thiosulfa	
Joe Rossi	P.O.#: 348 3	Sediment		lers	44			N=HNO ₃ S=H ₂ SO ₄	B =NaOH	
Name of state where samples were collected:	Quote #:	Š		Containers	243			6) Rema	<u> </u>	_
<u>pa</u>	3	site	Potable NPDES	8	256					
Sample Identification	Collected Date Time	Composite Soil	Water	. 34-	125					
Baseball Field	3-12-13 1222	4	+ > 1 **	3	-		+	+		
BBFFD	3-12-13 1223	+	+*/-	岩	131-1		+++	 		
FR	3-12-13 1410	+	+	3	1		++++			
Trip Blank	2	+	+	17	Kit +	- -	+++-	+		
MW-1	3-13-13 1030	+		13	1	,——	++++	 		
PW3D	3-13-13 1145	_	+	3	K# 1		++++	┼-┼		
PW3	3-13-13 300	+	1	12	13+1		++++	 		
MW1 MS	3-13-13 1031	+	+	131	13+1		+-+-+-	 		
mwimsp	3-13-13 1032	+	+	131	AH		+++-			
PW-1	3-13-13 13 2	1	+5+	131	HATT		++++	 		
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Type III (Reduced non-CLP) TX TRF	<u> </u>		EDD Required's, format:		res No		Relinquished by Cor		1000	
Type IV (CLP SOW) MA MC	CP CTRCP (If	Site-Sp∈ yes, indic	Decific QC (MS/MS cate QC sample and si	ISD/Di submit t	up)? Yes	s No ple volume.)		upon receipt 2	M_°c	

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Lancaster Laboratories Acct. # 7039

For Eurofins Lancaster Laboratories use only Group # 137500 Sample # 2 7 8 3860-83
Instructions on reverse side correspond with circled numbers.

COC # 328803

1) Client Inform			4)	Matrix		lacksquare	(5)		Analys	is Req	ueste	d		For Lab	Use Only	
Client:	Acct.#:		T		TT	1			Prese					FSC:		
Project Name #:	PWSID#:		4,_											SCR#:		
Empronmental allance Project Name#: Superior Tube	PWSID#:			Ground Surface		Į	sue							Pre	servation	Codes
Project Manager:	P.O. #:		Sediment	l Š j		l	15,	4 . [1 1			H=HC	.i T=	Thiosulfate
JOE ROSS;	3483		<u>≣</u>	O O		ဖြ	12-	1						N=HN	• –	:NaOH
Sampler:	Quote #:		M M			Ē	24	10		1				S=H ₂ S		Other
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Name of state where samples were collected:		(3)	_	Potable NPDES		ķ	An	12						1		
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Sample Identification		Grab	Soil	Water	Other:	Total	120	2			1 1					
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Type IV (CLP SOW) MA M	MCP CT RCP	Si	te-Spe	cific QC (N	/IS/MS	3D/Di	up)?	Yes	No	1	$\overline{}$					
	urofine Lancaster Lahora	(If ye	s, indica	te QC sample	and su	ıbmit tr	riplicate	e sample	volume.)		lem	peratu	re upor	receipt _	nul	_°C



Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
С	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
μg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	μL	microliter(s)
		pg/L	picogram/liter

- < less than The number following the sign is the <u>limit of quantitation</u>, the smallest amount of analyte which can be reliably determined using this specific test.
- > greater than
- J estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis

Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers Inorganic Qualifiers

Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	E	Estimated due to interference
С	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
Р	Concentration difference between primary and	W	Post digestion spike out of control limits
	confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995
X,Y,Z	Defined in case narrative		

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Prepared for:

Lancaster Laboratories 2425 New Holland Pike Lancaster, PA 17605-2425 Environmental Alliance, Inc. 5341 Limestone Rd Wilmington DE 19808

April 05, 2013

Project: 3483 / Superior Tube, PA

Submittal Date: 04/01/2013 Group Number: 1379406 PO Number: 3483 State of Sample Origin: PA

 Client Sample Description
 Lancaster Labs (LLI) #

 2M0329131030 Grab Potable Water
 7004206

 PW50329131100 Grab Potable Water
 7004207

 FB0329131115 Grab Potable Water
 7004208

 Trip_Blank032913 Water
 7004209

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO

Environmental Alliance, Inc.

Attn: Myrna Klair

Respectfully Submitted,

Mgn Moeller Senior Specialist

(717) 556-7261



2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Sample Description: 2M0329131030 Grab Potable Water

3483/ Superior Tube, PA

LLI Sample # PW 7004206 LLI Group # 1379406

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/29/2013 10:30 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 04/01/2013 17:10 Reported: 04/05/2013 13:04

4832M

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroeth	ene	156-59-2	6	5	1
10335	trans-1,2-Dichloroe	thene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	ne	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	1,500	50	10
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130942AA	04/05/2013 01:56	Sarah A Guill	1
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130942AA	04/05/2013 02:20	Sarah A Guill	10
	GC/MS VOA Water Prep GC/MS VOA Water Prep	SW-846 5030B SW-846 5030B	1 2	T130942AA T130942AA	04/05/2013 01:56 04/05/2013 02:20	Sarah A Guill Sarah A Guill	1 10



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Sample Description: PW50329131100 Grab Potable Water

3483/ Superior Tube, PA

LLI Sample # PW 7004207 LLI Group # 1379406

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/29/2013 11:00 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 04/01/2013 17:10 Reported: 04/05/2013 13:04

483P5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles SV	V-846 8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroethe	ne 156-60-5	< 5	5	1
10335	Tetrachloroethene	127-18-4	7	5	1
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10335	Trichloroethene	79-01-6	9	5	1
10335	Vinyl Chloride	75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130942AA	04/05/2013 02:43	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130942AA	04/05/2013 02:43	Sarah A Guill	1



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Sample Description: FB0329131115 Grab Potable Water

3483/ Superior Tube, PA

LLI Sample # PW 7004208 LLI Group # 1379406

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/29/2013 11:15 by KR Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 04/01/2013 17:10 Reported: 04/05/2013 13:04

483FB

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethe	ne	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroet	hene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethan	е	71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130942AA	04/05/2013 03:07	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130942AA	04/05/2013 03:07	Sarah A Guill	1



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Sample Description: Trip Blank032913 Water

3483/ Superior Tube, PA

LLI Sample # PW 7004209 LLI Group # 1379406

Account # 07039

Project Name: 3483 / Superior Tube, PA

Collected: 03/29/2013 Environmental Alliance, Inc.

5341 Limestone Rd

Wilmington DE 19808

Submitted: 04/01/2013 17:10 Reported: 04/05/2013 13:04

483TB

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles S	W-846	8260B	ug/l	ug/l	
10335	cis-1,2-Dichloroethen	е	156-59-2	< 5	5	1
10335	trans-1,2-Dichloroeth	ene	156-60-5	< 5	5	1
10335	Tetrachloroethene		127-18-4	< 5	5	1
10335	1,1,1-Trichloroethane		71-55-6	< 5	5	1
10335	Trichloroethene		79-01-6	< 5	5	1
10335	Vinyl Chloride		75-01-4	< 5	5	1

General Sample Comments

PA DEP Lab Certification ID 36-00037, Expiration Date: 1/31/14

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCE, PCE, DCE, TCA, VC 8260	SW-846 8260B	1	T130942AA	04/05/2013 03:31	Sarah A Guill	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T130942AA	04/05/2013 03:31	Sarah A Guill	1



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Page 1 of 1

Quality Control Summary

Client Name: Environmental Alliance, Inc. Group Number: 1379406

Reported: 04/05/13 at 01:04 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank <u>Result</u>	Blank <u>LOO</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: T130942AA	Sample num	ber(s): 70	04206-7004	209				
cis-1,2-Dichloroethene	< 5	5.	ug/l	103	103	80-120	0	30
trans-1,2-Dichloroethene	< 5	5.	ug/l	100	100	80-120	1	30
Tetrachloroethene	< 5	5.	ug/l	98	103	79-120	4	30
1,1,1-Trichloroethane	< 5	5.	ug/l	96	98	66-126	2	30
Trichloroethene	< 5	5.	ug/l	100	102	80-120	2	30
Vinyl Chloride	< 5	5.	ug/l	74	75	63-120	1	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 VOCs Batch number: T130942AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene	
7004206	101	101	101	101	
7004207	104	100	96	97	
7004208	102	101	99	99	
7004209	105	102	97	98	
Blank	100	99	98	100	
LCS	102	105	100	100	
LCSD	101	102	98	100	
Limits:	80-116	77-113	80-113	78-113	

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

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(If yes, indicate QC sample and submit triplicate sample volume.)



Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
С	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
μg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	μL	microliter(s)
		pg/L	picogram/liter

- less than The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.
- greater than
- estimated value The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ). J

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb

Dry weight basis

Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

В

U.S. EPA CLP Data Qualifiers:

Α

В

Organic Qualifiers

Value is <CRDL, but ≥IDL Estimated due to interference

Inorganic Qualifiers

C Pesticide result confirmed by GC/MS D Compound quantitated on a diluted sample Ε

Analyte was also detected in the blank

Concentration exceeds the calibration range of the instrument

TIC is a possible aldol-condensation product

Ν Presumptive evidence of a compound (TICs only) Concentration difference between primary and confirmation columns >25%

Compound was not detected

X,Y,ZDefined in case narrative

Ε М Duplicate injection precision not met Spike sample not within control limits Ν Method of standard additions (MSA) used S for calculation

U Compound was not detected Post digestion spike out of control limits W

Duplicate analysis not within control limits

Correlation coefficient for MSA < 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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